

IN THE CLAIMS:

1. (Currently Amended) An implantable prosthesis for repairing hernia defects, comprising:

a basic structure of a meshed, ~~in particular knitted~~, layer material which is deformable into a plug-type insert capable of being positioned in the hernia defect, [[-]] ~~wherein the said~~ basic structure [[is]] being a blank of the layer material of a shape preferable ranging from round to oval, which is placed in concertina pleats that are parallel to a direction of extension to form pleated layers, ~~and~~ [[-]] ~~wherein the~~ said concertina pleats being fixed only approximately centrally with respect to said direction of extension via a fixing arrangement, said fixing arrangement passing through said concertina pleats such that said basic structure, in [[its]] an undeformed position of rest, is approximately hourglass-shaped in a plan view.

2. (Previously Presented) A prosthesis according to claim 1, wherein the fixing arrangement is a fixing thread that is stitched through the pleated layers.

3. (Previously Presented) A prosthesis according to claim 2, wherein a fixing seam that is formed by the fixing thread runs crosswise of a direction of extension of the pleats and crosswise of a principal plane of extension of the undeformed prosthesis.

4. (Previously Presented) A prosthesis according to claim 2, wherein the thread of layer material and the fixing thread consist of a same plastic material, preferably

polypropylene, and have a same thread thickness, preferably 100 dtex.

5. (Previously Presented) A prosthesis according to claim 1, wherein the basic structure is fixed in its deformed, plug-type configuration by connection of adjoining lateral-edge areas.

6. (Previously Presented) A prosthesis according to claim 5, wherein the connection of the adjoining lateral-edge areas is produced by a seam, preferably of the same thread material as the layer-material thread.

7. (Previously Presented) A prosthesis according to claim 1, comprising a metal-containing, continuous, biocompatible coating.

8. (Currently Amended) A prosthesis according to claim 7, wherein the coating is a titanium-containing coating of a thickness of less than 2 μm , ~~preferably 5 to 700 nm~~.

9. (Previously Presented) A prosthesis according to claim 1, wherein the layer material for the basic structure is laser-beam cut to size.

10. (Previously Presented) A prosthesis according to claim 1, wherein two basic structures are placed crosswise one on top of the other and joined to each other.

11. (Previously Presented) A prosthesis according to claim 1, wherein the blank, not yet pleated, of the basic structure has an outer contour ranging from round to oval with a constriction of hourglass shape in the central area.

12. (New) A prosthesis according to claim 8, wherein the coating is a titanium-containing coating of a thickness of 5 to 700 nm.

13. (New) An implantable prosthesis for repairing hernia defects, comprising:
a basic structure comprising a fixing arrangement, a first meshed layer material portion and a second meshed layer material portion, said first meshed layer material portion being connected to said second meshed layer material portion, said first meshed layer material portion comprising a plurality of first meshed layer material portion concertina pleats, said second meshed layer material portion comprising a plurality of second meshed layer material portion concertina pleats, said plurality of first meshed layer material portion concertina pleats and said plurality of second meshed layer material portion concertina pleats being deformable to form a plug-type insert for positioning in a hernia defect, said first meshed layer material portion and said second meshed layer material portion having one or more of a round shape and an oval shape, each of said plurality of first meshed layer material portion concertina pleats being parallel to a longitudinal direction of said first meshed layer material portion to form a plurality of first pleated layers, each of said plurality of second meshed layer material portion concertina pleats being parallel to a longitudinal direction of said second meshed layer material portion.

15 portion to form a plurality of second pleated layers, said plurality of first meshed layer material portion concertina pleats being fixed to said plurality of said second meshed layer material portion concertina pleats at a center position between said first meshed layer material portion and said second meshed layer material portion via said fixing arrangement, wherein said first meshed layer material portion and said second meshed layer material portion define an
20 hourglass-shaped basic structure in an undeformed position.

14. (New) A prosthesis according to claim 13, wherein said fixing arrangement is a fixing thread extending through said pleated layers.

15. (New) A prosthesis according to claim 14, wherein a fixing seam that is formed by the fixing thread runs crosswise of a direction of extension of the pleats and crosswise of a principal plane of extension of the undeformed prosthesis.

16. (New) A prosthesis according to claim 14, wherein the thread of layer material and the fixing thread consist of a same plastic material and have a same thread thickness of 100 dtex.

17. (New) An implantable prosthesis for repairing hernia defects, comprising:
a basic structure comprising a first meshed layer material portion and a second meshed layer material portion, said first meshed layer material portion being connected to said second

mesched layer material portion, said first mesched layer material portion comprising a first
5 mesched layer material portion outer surface defining a plurality of first mesched layer material
portion concertina pleats, said second mesched layer material portion comprising a second
mesched layer material portion outer surface defining a plurality of second mesched layer
material portion concertina pleats, said plurality of first mesched layer material portion
concertina pleats and said plurality of second mesched layer material portion concertina pleats
10 being movable from a deformed state and undeformed state, said plurality of said first mesched
layer material portion concertina pleats and said plurality of second mesched layer material
portion concertina pleats defining a plug-type insert in said deformed state, said first mesched
layer material portion and said second mesched layer material portion having one or more of a
round shape and an oval shape, each of said plurality of first mesched layer material portion
15 concertina pleats being parallel to a longitudinal direction of said first mesched layer material
portion, each of plurality of said second mesched layer material portion concertina pleats being
parallel to a longitudinal direction of said first mesched layer material portion, said plurality of
first mesched layer material portion concertina pleats being fixed to said plurality of said second
mesched layer material portion concertina pleats at a center position between said first mesched
20 layer material portion and said second mesched layer material portion, wherein said first mesched
layer material portion and said second mesched layer material portion define an hourglass-shape
of said basic structure in said undeformed state.

18. (New) A prosthesis according to claim 17, wherein said basic structure comprises

a fixing arrangement, said fixing arrangement comprising a fixing thread extending through at least a portion of one or more of said plurality of said first meshed layer material portion concertina pleats and at least a portion of one or more of said plurality of second meshed layer material portion concertina pleats.

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19. (New) A prosthesis according to claim 18, wherein a fixing seam that is formed by the fixing thread runs crosswise of a direction of extension of said plurality of said second meshed layer material portion concertina pleats and said plurality of said first meshed layer material portion concertina pleats.

20. (New) A prosthesis according to claim 17, wherein the thread of layer material and the fixing thread consist of a same plastic material and have a same thread thickness of 100 dtex.